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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|--------------|----------------------|-------------------------|------------------|--|
| 10/689,839 | 10/22/2003 | Yoshinobu Fujiwara | 042715-5011 | 4226 | |
| 9629 | 7590 09/0 | 2006 | EXAM | EXAMINER | |
| | LEWIS & BOCK | SINGH, RAM | SINGH, RAMNANDAN P | | |
| 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004 | | | ART UNIT | PAPER NUMBER | |
| | , | | 2614 | | |
| | | | DATE MAILED: 09/06/2006 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | |
|--|---|-----------------|---------------------|--|--|--|
| Office Action Summary | | 10/689,839 | FUJIWARA, YOSHINOBU | | | |
| | | Examiner | Art Unit | | | |
| | | Ramnandan Singh | 2614 | | | |
| Period fo | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1)[🔀 | Responsive to communication(s) filed on 22 Ju | Ina 2006 | | | | |
| | This action is FINAL . 2b) This action is non-final. | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| -,— | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ | ☑ Claim(s) <u>1,2,4 and 5</u> is/are pending in the application. | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| | Claim(s) is/are allowed. | | | | | |
| | Claim(s) <u>1 and 2</u> is/are rejected. | | | | | |
| _ | Claim(s) <u>4 and 5</u> is/are objected to. | | | | | |
| _ | | | | | | |
| | on Papers | · | | | | |
| | • | * | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| <u> </u> | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| . مارد | a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received | | | | | |
| | | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | |
| | application from the International Bureau (PCT Rule 17.2(a)). | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
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| Attachment(s) | | | | | | |
| 1) Untice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date | | | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application | | | | | | |
| Paper No(s)/Mail Date 6) ☑ Other: <u>Claim Rejection</u> . | | | | | | |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on Jun. 22, 2006 have been fully considered but they are not persuasive.

Applicant's argument---"Pommer does not teach at least the features of a forward biasing circuit located on an output side of the diode bridge for supplying forward biased voltage to a diode bridge, as recited in claim 1" on page 4.

Examiner's response—Examiner agrees that the Applicant's amendment has overcome the Pommer reference. However, Examiner considers locating a forward biasing circuit on an output side of the diode bridge within one of ordinary skill in the art. For details, see the rejection of claim 1 set forth in this Office action.

Specification

2. The disclosure is objected to because of the following informalities:

In the specification, page 2, line 2, "xcessive loop current". There is a typographical error in the word "xcessive". Replace this word with the word "excessive".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "to a call **transmission/reception** circuit" in line 4. It is not clear whether this claim limitation refers to a call transmission circuit or a call reception circuit. This makes claim 1 ambiguous, and hence claim 1 is indefinite.

Claim 4 recites the limitation "both said current and said voltage increase in proportion from a starting point" in lines 3-4. Thus, both the current and the voltage increase in proportion to what? It is not clear in what proportion the current and voltage increase. Hence, claim 4 is indefinite. For the purpose of this Office action, Examiner considers "in proportion" as linearly.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pommer, II [US 4,406,927].

Regarding claim 1, Pommer, II teaches a telephone terminal equipment interface

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circuit shown in Fig. 3, comprising:

a diode bridge (10) for rectifying line current supplied from a subscriber line (L1-L2) and supplying the current to a call transmission/reception circuit [Fig. 3];

a forward biasing circuit comprising RI and C of AC supply voltage circuitry for supplying forward biased voltage to the diode bridge; and

a power supply circuit connected across L1, L2 terminals supplying power to the forward biasing circuit [Fig. 3];

wherein the forward biasing circuit (RI, C) is connected in series with the diode bridge (10) [Figs. 3, col. 4, lines 5-29].

Regarding locating a forward biasing circuit on an output side of the diode bridge, although Pommer, II teaches locating a forward biasing circuit located on an input side of the diode bridge [Fig. Fig. 3], it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to locate the forward biasing circuit located on either side of the diode bridge in order to accommodate a telephone interface circuit of the telephone terminal device subject to circuit, system and design constraints.

Regarding claim 2, Pommer, II further teaches the interface circuit, wherein the forward biasing circuit causes the diode bridge to operate in an activated state by supplying the forward biased voltage to the diode bridge [Fig. 3].

Allowable Subject Matter

7. Claims 4-5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 4 recites the telephone terminal equipment interface circuit, and the limitation, wherein current-voltage characteristics of the telephone interface are such that both the current and the voltage increase in proportion from a starting point.

Pommer, II does not teach the voltage-current characteristics that increase in proportion i.e. linearly from a starting point. No other prior art was found to teach this feature in the context of the claim.

Therefore, claim 4 would be allowable.

Claim 5 being dependent from claim 4 would also be allowable.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramnandan Singh whose telephone number is (571) 272-7529. The examiner can normally be reached on M-TH (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ramnandan Singh Examiner

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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600